

Appendix B

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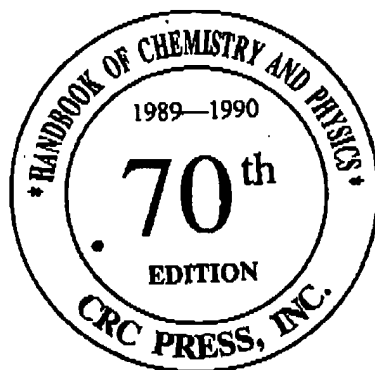
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and
PHYSICS

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ELECTRONIC CONFIGURATION OF THE ELEMENTS

By Laurence S. Foster :

References: P. H. Spedding and A. H. Dasso, Editors, *The Rare Earths*, John Wiley and Sons, Inc. Publishers, New York, 1961. R. F. Gould, Editor, *Lanthanide-Actinide Chemistry*, Advances in Chemistry Series, No. 71, American Chemical Society, Washington, D.C., 1967. Paper No. 14, Mark Fred, *Electronic Structure of the Actinide Elements*.

Atomic No.	Element	K		L		M		N		O		P		Q	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		s	p	s	p	s	p	d	s	p	d	f	s	p	d
1	H	1													
2	He	2													
3	Li Be B C N O F Ne	2	2												
4		2	2	1											
5		2	2	2											
6		2	2	2	1										
7		2	2	2	2										
8		2	2	2	2	1									
9		2	2	2	2	2									
10		2	2	2	2	2									
11	Na	2	2	2	2	1									
12	Mg	2	2	2	2	2									
13	Al	2	2	2	2	2	1								
14	Si	2	2	2	2	2	2								
15	P	2	2	2	2	2	2	1							
16	S	2	2	2	2	2	2	2							
17	Cl	2	2	2	2	2	2	2	1						
18	Ar	2	2	2	2	2	2	2	2						
19	K Ca Sc Ti V Cr Mn Fe Co Ni Cu Zn Ga Ge As Se Br Kr	2	2	2	2	2	2	2	1						
20		2	2	2	2	2	2	2	2						
21		2	2	2	2	2	2	2	2	1					
22		2	2	2	2	2	2	2	2	2					
23		2	2	2	2	2	2	2	2	2	1				
24		2	2	2	2	2	2	2	2	2	2	1			
25		2	2	2	2	2	2	2	2	2	2	2	1		
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37	Rb	2	2	2	2	2	2	2	2	2	2	2	2	2	2
38	Sr	2	2	2	2	2	2	2	2	2	2	2	2	2	2
39	Y	2	2	2	2	2	2	2	2	2	2	2	2	2	2
40	Zr	2	2	2	2	2	2	2	2	2	2	2	2	2	2
41	Nb	2	2	2	2	2	2	2	2	2	2	2	2	2	2
42	Mo	2	2	2	2	2	2	2	2	2	2	2	2	2	2
43	Tc	2	2	2	2	2	2	2	2	2	2	2	2	2	2
44	Ru	2	2	2	2	2	2	2	2	2	2	2	2	2	2
45	Rh	2	2	2	2	2	2	2	2	2	2	2	2	2	2
46	Pd	2	2	2	2	2	2	2	2	2	2	2	2	2	2
47	Ag	2	2	2	2	2	2	2	2	2	2	2	2	2	2
48	Cd	2	2	2	2	2	2	2	2	2	2	2	2	2	2
49	In	2	2	2	2	2	2	2	2	2	2	2	2	2	2
50	Sn	2	2	2	2	2	2	2	2	2	2	2	2	2	2
51	Sb	2	2	2	2	2	2	2	2	2	2	2	2	2	2
52	Te	2	2	2	2	2	2	2	2	2	2	2	2	2	2
53	I	2	2	2	2	2	2	2	2	2	2	2	2	2	2
54	Xe	2	2	2	2	2	2	2	2	2	2	2	2	2	2
55	Cs Ba La Ce Pr Nd Pm Sm Eu Gd Tb Dy Ho Er Tm Yb	2	2	2	2	2	2	2	2	2	2	2	2	2	2
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72	Hf	2	2	2	2	2	2	2	2	2	2	2	2	2	2
73	Ta	2	2	2	2	2	2	2	2	2	2	2	2	2	2
74	W	2	2	2	2	2	2	2	2	2	2	2	2	2	2
75	Re	2	2	2	2	2	2	2	2	2	2	2	2	2	2
76	Os	2	2	2	2	2	2	2	2	2	2	2	2	2	2
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83	Bi	2	2	2	2	2	2	2	2	2	2	2	2	2	2
84	Po	2	2	2	2	2	2	2	2	2	2	2	2	2	2
85	At	2	2	2	2	2	2	2	2	2	2	2	2	2	2
86	Rn	2	2	2	2	2	2	2	2	2	2	2	2	2	2
87	Fr	2	2	2	2	2	2	2	2	2	2	2	2	2	2
88	Ra	2	2	2	2	2	2	2	2	2	2	2	2	2	2
89	Ac	2	2	2	2	2	2	2	2	2	2	2	2	2	2
90	Th Pa U Np Pu Am Cm Bk Cf Es Fm Md No Lr	2	2	2	2	2	2	2	2	2	2	2	2	2	2
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* Note irregularity.